AMENDMENT

Please amend claim 72 and cancel claims 74 and 75.

Claims 1 -35 (Cancelled)

36. (Previously Presented) An apparatus for detecting nucleic acids in a sample, comprising:

(a) a binding space for purifying the nucleic acids by immobilizing the nucleic acids and separating impurities,

(b) an amplification space for amplifying the nucleic acids wherein at least a part of the amplification space is identical to a part of the binding space, and

(c) a detection space for detecting the nucleic acids.

37. (Previously Presented) The apparatus of claim 36 further comprising reagents for purifying, amplifying and detecting the nucleic acid.

38. (Previously Presented) The apparatus of claim 36, wherein the detection space comprises a part of at least one of the amplification space and the binding space.

39. (Previously Presented) The apparatus of claim 36, wherein at least one of the binding space and the amplification space comprises a capillary space.

40. (Previously Presented) The apparatus of claim 39 wherein the capillary space is a capillary reaction vessel surrounded by a heatable metal layer.

41. (Previously Presented) The apparatus of claim 39 wherein the capillary space is glass or polystyrene.

Claims 42 – 67 (cancelled)

68. (Previously Presented) An apparatus for amplifying nucleic acids comprising a capillary reaction vessel surrounded by a single heatable metal layer wherein the layer is coated on the capillary reaction vessel.

69. (Previously Presented) The apparatus of claim 36 further comprising a sample transport mechanism which transports the sample and reagents through the binding space, the amplification space and the detection space.

70. (Previously Presented) The apparatus of claim 36 wherein the binding space provides a surface for binding the nucleic acids.

71. (Previously Presented) The apparatus of claim 70 wherein the binding space is defined by an inner surface of a reaction vessel, wherein the inner surface binds nucleic acids.

72. (Currently Amended) An apparatus for detecting nucleic acids in a liquid sample, comprising:

(a) a space comprising a capillary reaction vessel surrounded by a heatable metal layer, wherein the interior surface of the vessel ~~a surface which~~ binds nucleic acids;

(b) reagents for amplifying and detecting the nucleic acids that become bound to the surface;

(c) a sample transport mechanism which transports the sample and reagents through the space.

73. (Previously Presented) The apparatus of claim 72 further comprising reagents for purifying the nucleic acids.

Claims 74 and 75 (Cancelled)

76. (Previously Presented) The apparatus of claim 72 wherein the capillary space is glass or polystyrene.